

Part C  
2A-1  
**AMENDMENT TO  
PCB REMEDIATION NOTICE**

**WASHINGTON PARK CORPORATE CENTER  
LOT 3, TRILLIUM RESIDENTIAL  
4400 BLOCK EAST WASHINGTON ST.  
PHOENIX, ARIZONA**

**JOB NO. 2188JK154**



**Western  
Technologies  
Inc.**

The Quality People  
Since 1955

**PHOENIX – ARIZONA**

3737 East Broadway Road  
Phoenix, Arizona 85040-2921  
(602) 437-3737 • fax 470-1341

Prepared For:

United States Environmental  
Protection Agency  
Region 9

July 22, 2008



*Expires on 06/30/2010*

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Geotechnical Engineer

  
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July 22, 2008

United States Environmental Protection Agency  
Region 9  
RCRA Corrective Action Office  
Waste Management Division  
Mail Code WST-5  
75 Hawthorne Street  
San Francisco, California 94105

Attn: Carmen D. Santos

Re: Amendment to the PCB Remediation Notice  
Washington Park Corporate Center  
Lot 3, Trillium Residential  
4400 Block of East Washington Street  
Phoenix, Arizona

WT Job No. 2188JK154

Western Technologies Inc. presents this amendment to the original PCB Remediation Notice, pursuant to 40 CFR §761.61(a)(3), for proposed modifications for closure of polychlorinated biphenyls (PCBs) in soil on Lot 3 in the Washington Park Corporate Center, 44<sup>th</sup> Street and Washington Street, in Phoenix, Arizona. Specifically, we are proposing to implement the capping and notice requirements in 40 CFR §761.61(a)(4)(i)(A) triggered due to the presence of PCBs at concentrations greater than 1 part per million (ppm) but less than or equal to 10 ppm within a *High Occupancy Area* in two "Sub-Part O" verification grids at a depth of 19 feet below original grade. The proposed capping and notice requirements shall comply with the provisions contained in 40 CFR §761.61(a)(7,8).

As we discussed over the telephone, the original self-implementing clean-up work has reached substantial completion with only these three grids requiring further action. The completion of a real estate transaction is contingent upon the successful resolution of the PCB clean-up effort. At this time, the current owner/developer wants to proceed with the general backfill of the remediated area, exclusive of the identified contaminated area comprised of the three grids. Please advise us if there is any reason not to proceed with the general fill activities. No action will take place until we hear from you. We are happy to provide any additional information you feel is necessary to complete your review of this request.

If you have any questions about this amendment, feel free to contact David Regonini at Western Technologies Inc. at 602-437-3737. Thank you for your attention to our project. We look forward to your review and commentary.

Respectfully,  
**WESTERN TECHNOLOGIES INC.**

  
David Regonini, REA  
Director, Environmental Services

**WASHINGTON PARK CORPORATE CENTER, LOT 3  
44<sup>TH</sup> STREET AND WASHINGTON STREET  
PHOENIX, ARIZONA**

**AMENDMENT TO PCB REMEDIATION NOTICE  
WT JOB NO. 2187JK184**

Western Technologies Inc. (WT) submits this amendment to the original PCB remediation notice pursuant to the requirements of the self-implementing clean-up procedures contained in 40 CFR § 761.61(a)(3).

**LOCATION AND DESCRIPTION OF THE SITE**

The Washington Park Corporate Center (WPCC) contains a multi-use planned development that is bounded by Van Buren Street on the north, Washington Street on the south, State Route 143 on the east, and 44<sup>th</sup> Street on the West, in Phoenix, Arizona. Lot 3 of the Washington Park Corporate Center is encompassed by a proposed private roadway named Dupont Circle and it has an assigned street address of 111 North Dupont Circle. According to records from the Maricopa County Assessor's Office, the Assessor's Parcel Number for Lot 3 is 124-10-041. The cadastral description of the Property, relative to the US Public Land Survey System, is generally within a portion of the southwest ¼ of the northwest ¼ of the northeast ¼ of Section 7, Township 1 North, Range 4 East, Gila and Salt River Baseline and Meridian, Maricopa County, Arizona.

The Site currently contains vacant graded land with no structures or occupants. Excavations of varying depth currently exist from the implementation of the self-implementing clean-up activities. In the surrounding area, an occupied office building is to the north. A second office building under construction, followed by State Route 143, is to the east. A vacant lot, followed by Washington Street is to the south. The City of Phoenix Light Rail System is installed within the Washington Street right-of-way and the Pueblo Grande Museum is further south, across Washington Street. Graded land parcels within WPCC, followed by 44<sup>th</sup> Street, is to the west. Two Circle K convenience stores occupy the northeast corner of Washington and 44<sup>th</sup> Street, and the southeast corner of Van Buren Road and 44<sup>th</sup> Street. Infrastructure improvements within the Dupont Circle right-of-way surround Lot 3.

Lot 3 of the Washington Park Corporate Center is planned for development as an upscale residential apartment complex. The intended builder of the apartment complex is Trillium Development, LCC of Tempe, Arizona. Exhibit 1 in Appendix B contains a site plan showing the proposed lay-out of the apartment complex. Structures will include four-story residential apartment buildings, a centrally positioned 4-story parking garage, and support facilities consisting of a leasing office, maintenance area, courtyard and pool, great room and fitness center.



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The location of the identified contaminated area is within the southeastern section of Lot 3, beneath the western edge of one apartment building and the adjoining courtyard. Exhibit 1 in Appendix A is annotated to show the location of the identified contaminated area relative to the apartment building. Exhibit 2 in Appendix B contains a topographic overlay of the finished post-clean-up excavation grade at the identified contaminated area onto the proposed development. Based on this exhibit, the identified contaminated area straddles the western edge of two apartment units, their connected patios, and the adjoining courtyard area.

A detention basin for stormwater collection and dissipation will be installed approximately 14 feet due west of the identified contaminated area. The detention basin is proposed as a 10-foot diameter corrugated metal vessel with gasket-sealed seams that will discharge to a dry well located to the southeast of the detention basin. The drywell is proposed to be installed approximately 65 feet to the southwest of the identified contaminated area. Exhibit 3 in Appendix B shows the location of the drywell relative to the proposed detention basin. This figure also shows a 5-foot westward shift of the detention basin's location, away from the identified contaminated area.

Exhibit 4 in Appendix B illustrates a plan view showing the location of the identified contaminated area, labeled as the "Area of Remediation" on the diagram, to the planned detention basin and the apartment building. The diagram shows the footprint of the building overlaying 7 feet of the identified contaminated area. Of the 7-foot overlay, approximately 2 feet fall within an enclosed living space. The final vertical separation from the base of the building to the identified contaminated area will be 21 feet. The retention basin is also depicted on Exhibit 4 and shows it to be just under 15 feet due west of the identified contaminated area. The detention basin will have a 10-foot diameter that will be covered by 3 feet of fill. The planned excavation for the installation of the tank is approximately 14 feet deep, which will be approximately 5 feet above the identified contaminated area. The excavation will be laid back to the east and west during installation of the tank. The illustration of the proposed lay-back on Exhibit 4 shows that it will not encounter the identified contaminated area.

**NATURE OF CONTAMINATION, 40 CFR § 761.61(a)(3)(A)**

The Washington Park Corporate Center was assembled from multiple parcels formerly containing different uses. The east half of Lot 3 was occupied by the former National Electric Coil (NEC) facility at 4444 East Washington Street, which was the focus of a TSCA remediation project in the mid-1980s, when PCBs were remediated to a target level of 25 parts per million (ppm).

From November 2007 to May 2008, PCB clean-up was implemented on Lot 3 according to the PCB Remediation Notice previously submitted to EPA. Based on the results of composite grid sampling following the requirements of Sub-Part O, three grids currently contain PCB



concentrations above the remedial objective of less than or equal to 1 ppm for *High Occupancy Areas*. At this time, the excavation at those three grids has reached approximately 19 feet below the original ground surface, and the PCB levels, as measured in the verification samples at that depth, were reported at 1.2, 4.1 and 6.8 milligrams per kilogram (mg/kg). All other verification samples met the remedial objective of less than or equal to 1 ppm.

#### **SAMPLING PROCEDURES 40 CFR § 761.61(a)(3)(B)**

Verification samples were obtained on Lot 3 using a square grid lay-out and composite sampling method with grid points established every 1.5 meters. A maximum of 9 grid points were combined into a single composite, with the maximum area represented by a single composite encompassing three collinear points in the east-west and north-south directions. The composites were comprised of equal volumes of soil from each grid point, which were collected using TerraCore 10-gram disposable samplers. At each grid point, soils were loosened and mixed using a pre-cleaned rock hammer with an approximate 3- to 4-inch diameter area to a depth of 4 inches. Soils were deposited directly into 8-ounce certified clean glass jars. Composites consisting of nine grid points were comprised of two 10-gram aliquots of soil from each grid point. In addition to the grid samples, sidewall samples were also obtained at selected depths. These composites consisted of three collinear points from the sidewall, corresponding to the edge of the designated grid. A total of six 10-gram aliquots were extracted from each of the three grid points comprising the sidewall composite samples. The quantity of soil collected per composite sample was sufficient for the laboratory to analyze the samples and perform quality control tests. The composite sample was mixed by rotating and tumbling the jar after soil from each grid point was added to the sample container. The samples were labeled with the date and time of collection and the grid number. The sample information was then recorded onto a chain-of-custody record and the samples were stored in a cooler with wet ice for delivery to the laboratory.

Between grids, the rock hammer was decontaminated using a procedure that consisted of spraying and wiping the hammer with a Liquinox soapy water solution, followed by a de-ionized water spray rinse, then by a methanol spray rinse. The hammer was cleaned with de-ionized water between individual grid points that comprised a single composite sample.

#### **LOCATION AND EXTENT OF IDENTIFIED CONTAMINATED AREA 40 CFR § 761.61(a)(3)(C)**

##### **The Identified Contaminated Area**

The identified contaminated area encompasses Grids T6-15, T7-15 and T8-15 within the Lot 3 remediated area (See Appendix B, Figure 2). These three grids were excavated to a depth of 19 feet below original grade in eight iterative lifts. The final PCB concentration at 19 feet was measured at 1.2 mg/kg in Grid T6-15, 4.1 mg/kg in Grid T7-15, and 6.8 mg/kg in Grid T8-15.



The final stage of excavation from 16 to 19 feet below original grade was accomplished with the use of a hydraulically-operated ram hoe attached to a track hoe to break apart the weathered, very dense granite bedrock. Based on previous work around the area, this weathered granite formation typically exhibits high resistance to penetration using the standard penetration test method or using the ring-lined barrel sampler (ASTM D1586 and ASTM D3550, respectively). This weathered granite formation can vary in depth from a few feet to approximately 20 feet below existing grade.

#### **Deepened Excavation Surrounding the Identified Contaminated Area**

Seven additional grids around the south, west, and north sides of the identified contaminated area were excavated to depths of 8 to 13 feet below original grade, where verification results meeting the remedial objective of less than or equal to 1 ppm for High Occupancy Areas were measured. The excavations reached 8 feet in one grid, 10 feet in four grids, and 13 feet in two grids. To the south, Grid T5-15 was excavated to 10 feet below original grade where a final verification result of 0.086 mg/kg was obtained. To the north, Grid T9-15 was excavated to 13 feet below original grade where a final verification result of 0.11 mg/kg was obtained. To the west, Grids T5-14, T6-14, and T7-14 were all excavated to 10 feet below original grade, where verification results of <0.025 mg/kg, 0.81 mg/kg, and 0.57 mg/kg were obtained. Grid T8-14 was excavated to 13 feet below original grade and it was measured with a final verification result of 0.38 mg/kg. Grid T9-14 was excavated to 8 feet where a final verification result of 0.057 mg/kg was obtained.

#### **Perimeter Sidewall Samples**

A series of perimeter sidewall samples were tested when the base of the excavation had reached 8 feet below grade to evaluate the potential for a lateral extension of the contaminated area. The sidewall samples were taken from a depth of 5.5 feet below original grade. The samples consisted of three-point composites corresponding to the gridline alignments for the verification sampling grid. Therefore, each of the composites consisted of three collinear points separated by 1.5 meters. The sidewall samples were designated by the corresponding grid numbers and a reference to the sidewall from which they were derived. The sidewall samples were taken from grids in Rows 5 through 9 and Columns 14 and 15, exclusive of Grid T7-14.

The north sidewall samples from Grids T9-14 and T9-15 were reported with PCBs at 0.087 mg/kg and 0.65 mg/kg, respectively.

The east sidewall samples from Grids T5-15, T6-15, T7-15, T8-15 and T9-15 were reported with PCBs ranging from <0.025 mg/kg to 0.21 mg/kg.



The south sidewall sample from Grid T5-15 was reported with PCBs at 0.027 mg/kg. A south sidewall sample was not obtained from Grid T5-14 because its depth had only reached 3 feet at the time of the sidewall sampling. A south sidewall sample was obtained from Grid T6-14 and a west sidewall sample was obtained from Grid T5-15. These two sidewalls also corresponded to the north and east sides of Grid T5-14. The PCB results for these two samples were reported at 2.2 mg/kg and 9.5 mg/kg, respectively, so Grid T5-14 was deepened from 3 feet to 10 feet and re-tested at its base and along its south and west sidewalls (Samples T5-14, T5-14-SSW, and T5-14-WSW). Results were reported as <0.025 mg/kg in T5-14, 0.085 mg/kg in T5-14-SSW, and <0.025 mg/kg in Sample T5-14-WSW.

The west sidewall samples from Grids T6-14, T8-14, and T9-14 were reported with PCBs at 0.19 mg/kg, <0.025 mg/kg, and 0.40 mg/kg, respectively. A west sidewall sample was not obtained from Grid T7-14 because Grid T7-13 adjoining it to the west had been excavated to 5 feet where PCBs were reported at <0.025 mg/kg. Grid T7-14 was deepened three times to 4, 6, and 10 feet, even though verification results met the remedial objective, as a contingency due to PCB concentrations at depth in adjoining grids representing a potential for lateral migration. Those verification results at the 4-, 6-, and 10-foot lifts were reported at 0.87 mg/kg, 0.78 mg/kg, and 0.57 mg/kg, respectively. The iterative vertical results for Grid T7-14 were considered sufficient to adequately address lateral migration at this grid.

#### **Perimeter Grids**

A total of eighteen additional grids within Rows 4 and 10 and Columns 13 and 16 were excavated to 3-5 feet below original grade. These grids completed a perimeter around the deepened area. The range of final verification results ranged from <0.025 to 0.34 mg/kg.

#### **Screening Samples for Potential Co-Contaminants**

During the excavation work, several grab samples were taken to screen for contaminant concentrations. These samples were taken in response to the reported detection of organic odors during the disturbance of the in situ soil matrix by the excavation equipment. Field screening with a Rae Systems Model MiniRae 2000 Photoionization detector equipped with a 10.6 electron-Volt detector produced measureable VOC concentrations in the soil matrix.

The initial set of three grab samples were taken on March 3 from the workface of a processed soil stockpile within the excavation (Sample PS-1) and two sidewall samples taken from discreet locations within the east side of Grid T7-15 (Sample T7-15ESW) and the south sidewall of Grid T5-14 (Sample T5-14-SSW). These samples were obtained from 4 to 6 feet below original grade. Tables 3, and 4 at the end of this amendment summarize the laboratory results for Polynuclear Aromatic Hydrocarbons (PAHs), and Halogenated and Aromatic Volatile Organics (VOCs). The PAH compounds Benzo(b)fluoranthene and Benzo(k)fluoranthene were detected at trace



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concentrations of 6.6 micrograms per kilogram ( $\mu\text{g/kg}$ ) and 3.1  $\mu\text{g/kg}$ , respectively. VOC compounds were not reported above respective method reporting limits.

The second set of grab samples were collected on April 3 from the 16-to-19-foot lift of Grids T6-15, T7-15, and T8-15, after the material had been loosened with the ram hoe. Samples T6-15-16P, T7-15-16P, and T8-15-16P were taken to characterize loosened soil for disposal profile due to additional field screening results suggesting the presence of VOCs. The three samples were analyzed for Total Concentrations of Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, and Silver, and for PAH and VOC compounds. Tables 2 through 4 at the end of this report summarize the results for these samples.

Concentrations of Cadmium, Mercury, Selenium, and Silver, were reported as not detected, less than respective method reporting limits.

Arsenic was detected at concentrations of 11 to 13 mg/kg, which were consistent with published background concentrations in Arizona soils ranging from 3.8 to 24 mg/kg.

Barium was detected at concentrations of 81 to 120 mg/kg, which were consistent with published background concentrations in Arizona soils ranging from 72.6 to 230 mg/kg.

Chromium was detected at concentrations of 8.2 and 10 mg/kg, which were consistent with published background concentrations in Arizona soils ranging from 7.0 to 34 mg/kg.

Lead was detected at concentrations of 2.4 to 3.2 mg/kg, which were consistent with published background concentrations in Arizona soils ranging from not detected to 24.5 mg/kg.

A total of nine PAH compounds were detected in one or more of the samples. The detected constituents included Acenaphthene (6.1  $\mu\text{g/kg}$ ), Acenaphthalene (5  $\mu\text{g/kg}$ ), Anthracene (8.5  $\mu\text{g/kg}$ ), Benzo(b)fluoranthene (3.4 and 4  $\mu\text{g/kg}$ ), Chrysene (2.3, 4.8 and 12  $\mu\text{g/kg}$ ), Fluoranthene (8.7, 12, and 15  $\mu\text{g/kg}$ ), Pyrene (5.6, 23, and 25  $\mu\text{g/kg}$ ), Flourene (49  $\mu\text{g/kg}$ ), Phenanthrene (24 and 31  $\mu\text{g/kg}$ ), and Napthalene (36  $\mu\text{g/kg}$  in two samples).

A total of nine VOC compounds were detected in one or more of the samples. The detected constituents included sec-Butylbenzene (78 and 100  $\mu\text{g/kg}$ ), tert-butylbenzene (65 and 210  $\mu\text{g/kg}$ ), 4-isopropyltoluene (310 and 1000  $\mu\text{g/kg}$ ), 4-Chlorotoluene (230  $\mu\text{g/kg}$ ), Tetrachloroethene (59  $\mu\text{g/kg}$ ), 1,2,3-Trichlorobenzene (62 and 750  $\mu\text{g/kg}$ ), 1,2,4-Trimethylbenzene (100 and 2700  $\mu\text{g/kg}$ ), Xylenes (230  $\mu\text{g/kg}$ ), and 1,3,5-Trimethylbenzene (370, 2100, and 2800  $\mu\text{g/kg}$ ).



**CLEANUP PLAN, 40 CFR § 761.61(a)(3)(D)**

**Proposed Capping Methods**

The proposed capping method will involve three stages consisting of the building's proposed foundation, the placement of engineered fill into the excavation, and a sack mix liner with a vertical shock-crete wall over and adjoining the identified contaminated area.

**Building Foundation** - The proposed foundation of the apartment building consists of a slab-on-grade, monolithic, post-tensioned concrete slab that will have a minimum thickness of 8 inches. Exhibits 4 and 5 in Appendix B illustrate the proposed foundation design. The planned minimum thickness of 8 inches is sufficient to satisfy the minimum requirement of 6 inches of asphalt or concrete as required by CFR 761.61(a)(7), and will satisfy the permeability, sieve, liquid limit, and plasticity index criteria at 40 CFR 761.75(b)(ii-v).

**Proposed Fill** - The existing open excavation will require fill to return the area to grade prior to site development. We propose the monitoring of the placed fill using the parameters of permeability, sieve, liquid limit, and plasticity index to achieve values equal to or greater than surrounding native soils. For the purpose of this evaluation, parameters as a measured by the apartment builder's geotechnical engineering study will be referenced. Testing will occur in 10-inch lifts up to a nominal depth of 3 feet below original grade. Above 3 feet, general fill will be placed consistent with other materials brought onto Lot 3.

**Physical Barrier System** - The proposed detention basin is proposed for installation at an approximate distance of 14 feet due west of the identified contaminated area (See Exhibit 3 in Appendix A). Although the proposed location of installation, the planned depth of installation, and the planned lay-back of the excavation will not directly encounter the identified contaminated area, this amendment proposes the addition of a physical barrier within the base of the open excavation above the identified contaminated area, and the installation of a vertical separation above the west side of the identified contaminated area. These barriers will provide a physical barrier to the unintentional disturbance of the identified contaminated area during installation of the detention basin, and into the future after completion of the apartment complex. The base layer will consist of a 1-sack controlled low strength concrete placed to a minimum thickness of 6 inches. The lateral wall will consist of metal mesh secured with anchors, and faced with shockcrete. The height of the vertical wall will be about 14 feet above the existing grade of the identified contaminated area. This height will allow for the excavation of the lay-back without disturbing the wall.

We believe the proposed system of capping will accommodate the narrative standards found in 40 CFR 264.310(a) that include the provision of long-term minimization liquid migration, function



with minimum maintenance, provide drainage and minimize erosion or abrasion, accommodate settling and subsidence, and provide for adequate permeability.

### **Proposed Additional Characterization**

This amendment proposes the implementation of additional site characterization activities in support of the proposed capping system. The purpose of these additional characterizations will be to:

- provide a vertical profile beneath the identified contaminated area,
- provide for a subsurface characterization within the proposed locations of detention basins, (specifically the southeast detention basin), and
- evaluate potential vapor migration issues in connection with suspected co-contaminants.

### **Vertical Assessment at the Identified Contaminated Area**

The vertical assessment will consist of the drilling and sampling of three soil borings positioned within the centers of the three grids comprising the identified contaminated area. The installation of the physical barrier system and soil fill will precede these borings to facilitate the set-up of the rig over the area. Any penetrations through the fill and barrier will be sealed with the placement of a bentonite slurry fill in all penetrations.

The borings will be drilled using a down-hole percussion hammer drilling technique system (ODEX) to planned depths of 40 feet below original grade. This drilling technique should facilitate drilling through the very dense, weathered granite bedrock. The proposed drilling depth will provide a 20-foot assessment beneath the surface of the identified contaminated area. Samples will be obtained at 5-foot intervals through the depth of the borings. Analysis will be for PCBs using EPA method 8082 for the entire depth.

### **Detention Basin Characterizations**

The planned areas of excavation for the detention basins will be further evaluated for PCB concentrations at depth with the installation and sampling of soil borings. The ODEX drill rig will be used to advance these borings to planned depths of 20 feet below original grade, which will be sufficient to characterize the planned zone of excavation. We will use four borings each to evaluate the southeast and southwest detention basins, and two borings each to evaluate the northeast and northwest detention basins. Samples will be obtained at 5-foot intervals through the depth of the borings. Analysis will be for PCBs using EPA method 8082.

Since imported fill will be brought onto Lot 3 to return the surface to original grade, a screening program will be implemented for the import material, specifically at the deep excavation above the identified contaminated area. Grab samples of the imported soil will be taken during the fill



operation at a minimum-specified time interval of 2 hours or a maximum compacted import soil volume of 160 cubic yards, whichever occurs first. Samples will be collected for analysis of PCBs using EPA method 8082, VOCs using EPA method 8260, PAHs using EPA method 8310, and Total Concentrations of the 8 RCRA metals using EPA methods 3050/6000-7000. Sample points will be documented in the field using GPS coordinates taken at the time of sampling.

If the resulting data from the characterization activity suggests a potential for PCBs to be further encountered during the construction activity, then a monitoring task will be proposed.

### **Soil Vapor Screening**

Trace concentrations of co-contaminants were detected in the final lift removed from the identified contaminated area. Field screening also suggested the potential for vapor phase emission from the lithologic formation at 19 feet. Therefore, we are proposing to conduct a soil vapor assessment to ascertain potential risks associated with these contaminants. The assessment will involve the installation and monitoring of two nested vadose zone vapor monitoring wells. The wells will consist of three 1-inch diameter probes installed to specified depths with screened intervals of 25 to 30 feet, 15 to 20 feet, and 5 to 10 feet. The annular space between each screened interval will be sealed with dry granular bentonite and hydrated bentonite grout. Sampling for VOC constituents using vacuum canisters and EPA method TO-15 will be used to characterize soil vapor concentrations. At this time, we do not expect to perform soil sampling for VOCs due to the hard soils encountered at depth beneath the Lot 3.

The vapor well locations are planned beneath the proposed location of the building pad, approximately 15 feet due east of the identified contaminated area. Two vapor sampling events will be conducted. During probe emplacement, subsurface conditions are typically disturbed. Therefore, to allow for subsurface conditions to equilibrate, the purge volume test, leak test, and soil gas sampling will not be conducted for at least 7 days following installation of the wells. The second sampling event will occur 7 days after the first. Data resulting from the monitoring will be used to evaluate the potential for a lateral and vertical gradient.

The potential for exposure within the planned apartment building will be evaluated using the Johnson-Ettinger Model for the prediction of subsurface vapor intrusion into buildings. The input variables will consist of actual vapor concentrations of potential contaminants of concern, along with in situ soil characteristics.

The results of the model will be used to determine whether any additional risk management measures would need to be implemented at the site, such as vapor barriers (Liquid Boot or similar), on-site passive or active vapor collection systems, etc.



**Deed Restrictions**

Since the proposed use of Lot 3 qualifies as a High Occupancy Area, and concentrations of PCBs will remain at the identified contaminated area at concentrations above 1 mg/kg but at or below 10 mg/kg, a notation on the deed shall be recorded. The deed will be recorded with the Maricopa County Recorder's Office, and a copy of the notice, along with a copy of the final remediation report, will be submitted to the Arizona Department of Environmental Quality generally conforming to the intent of the Arizona Administrative Code (A.A.C), R18-7-209 and -210. The notice will include a description of the PCB remediation waste at the site, a description of the capping system employed, the clean-up levels achieved across the site (less than or equal to 1 ppm) and beneath the cap (greater than 1 ppm but less than or equal to 10 ppm), and a description of the location where PCBs remain above 1 ppm but less than or equal to 10 ppm. The owner of the property will submit a signed certification to EPA that the notification to the deed has been submitted and recorded.

The language of the proposed notice shall be drafted in cooperation with the current owner of the property (AIG Retirement Services, Inc.) and the anticipated property owner and apartment builder (Trillium Development, LLC) and submitted to EPA for review and approval before recordation.



Table 1  
Summary of PCB Verification Results  
Rows 4 though 10, Columns 13 through 16  
Washington Park Corporate Center, Lot 3  
Phoenix, AZ

EPA Method 8082  
Results in Milligrams per Kilogram (mg/kg)

Grid/Sample No.	Description	Depth of Lift (ft)	PCBs						Sampled	Analyzed	Lab	Lab Report No.
				<=1 PPM	1-10 PPM	10-25 PPM	25-50 PPM	>50 PPM				
T4-13	Base of excavation	3.0	<0.025	x					1/25/2008	1/28/2008	OCA	WES AZ4894
T4-14	Base of excavation	3.0	0.34	x					1/25/2008	1/29/2008	OCA	WES AZ4894
T4-15	Base of excavation	3.0	0.034	x					1/25/2008	1/28/2008	OCA	WES AZ4894
T4-16	Base of excavation	3.0	0.030	x					1/24/2008	1/25/2008	OCA	WES AZ4891
T5-13	Base of excavation	3.0	0.24	x					1/25/2008	1/28/2008	OCA	WES AZ4894
T5-14	Interim lift, removed	3.0	0.810	x					1/25/2008	1/28/2008	OCA	WES AZ4894
T5-14	Base of excavation	10.0	<0.025	x					3/19/2008	3/20/2008	OCA	WES AZ5037
T5-15	Interim lift, removed	3.0	1.6		x				1/25/2008	1/28/2008	OCA	WES AZ4894
T5-15	Interim lift, removed	4.0	1.3		x				2/4/2008	2/8/2008	ESC	L330313
T5-15	Interim lift, removed	6.0	2.2		x				2/22/2008	2/25/2008	OCA	WES AZ4961
T5-15	Interim lift, removed	8.0	0.98	x					3/6/2008	3/7/2008	OCA	WES AZ5004
T5-15	Base of excavation	10.0	0.086	x					3/19/2008	3/20/2008	OCA	WES AZ5037
T5-16	Base of excavation	3.0	0.043	x					2/8/2008	2/12/2008	OCA	WES AZ4934
T6-13	Base of excavation	3.0	0.027	x					1/25/2008	1/28/2008	OCA	WES AZ4894
T6-14	Interim lift, removed	3.0	23			x			1/25/2008	1/29/2008	OCA	WES AZ4894
T6-14	Interim lift, removed	4.0	5.8		x				2/4/2008	2/8/2008	ESC	L330313
T6-14	Interim lift, removed	6.0	4.4		x				2/22/2008	2/25/2008	OCA	WES AZ4961
T6-14	Interim lift, removed	8.0	2.4		x				3/6/2008	3/7/2008	OCA	WES AZ5004
T6-14	Base of excavation	10.0	0.81	x					3/19/2008	3/20/2008	OCA	WES AZ5037
T6-15	Interim lift, removed	3.0	5.4		x				1/25/2008	1/29/2008	OCA	WES AZ4894
T6-15	Interim lift, removed	4.0	3.0		x				2/4/2008	2/8/2008	ESC	L330313
T6-15	Interim lift, removed	6.0	1.7		x				2/22/2008	2/25/2008	OCA	WES AZ4961
T6-15	Interim lift, removed	8.0	2		x				3/6/2008	3/7/2008	OCA	WES AZ5004
T6-15	Interim lift, removed	10.0	2.9		x				3/19/2008	3/20/2008	OCA	WES AZ5037
T6-15	Interim lift, removed	13.0	1.8		x				3/24/2008	3/25/2008	OCA	WES AZ5057
T6-15	Interim lift, removed	16.0	2.1		x				3/27/2008	3/28/2008	OCA	WES AZ5076
T6-15	Base of excavation	19.0	1.2		x				6/23/2008	6/25/2008	OCA	WES AZ5232
T6-16	Base of excavation	3.0	0.18	x					2/8/2008	2/12/2008	OCA	WES AZ4934
T7-13	Interim lift, removed	3.0	0.73	x					1/25/2008	1/28/2008	OCA	WES AZ4894
T7-13	Base of excavation	5.0	<0.025	x					3/19/2008	3/20/2008	OCA	WES AZ5037

Table 1  
Summary of PCB Verification Results  
Rows 4 though 10, Columns 13 through 16  
Washington Park Corporate Center, Lot 3  
Phoenix, AZ

EPA Method 8082  
Results in Milligrams per Kilogram (mg/kg)

Grid/Sample No.	Description	Depth of Lift (ft)	PCBs						Sampled	Analyzed	Lab	Lab Report No.
				≤1 PPM	1-10 PPM	10-25 PPM	25-50 PPM	>50 PPM				
T7-14	Interim lift, removed	3.0	2.0		x				1/25/2008	1/29/2008	OCA	WES AZ4894
T7-14	Interim lift, removed	4.0	0.84	x					2/4/2008	2/8/2008	ESC	L330313
T7-14	Interim lift, removed	6.0	0.78	x					2/22/2008	2/25/2008	OCA	WES AZ4961
<b>T7-14</b>	<b>Base of excavation</b>	<b>10.0</b>	<b>0.57</b>	<b>x</b>					<b>3/18/2008</b>	<b>3/19/2008</b>	<b>OCA</b>	<b>WES AZ5033</b>
T7-15	Interim lift, removed	3.0	8.8		x				1/25/2008	1/28/2008	OCA	WES AZ4894
T7-15	Interim lift, removed	4.0	16			x			2/4/2008	2/8/2008	ESC	L330313
T7-15	Interim lift, removed	6.0	10		x				2/22/2008	2/25/2008	OCA	WES AZ4961
T7-15	Interim lift, removed	8.0	6.1		x				3/6/2008	3/7/2008	OCA	WES AZ5004
T7-15	Interim lift, removed	10.0	3.3		x				3/18/2008	3/19/2008	OCA	WES AZ5033
T7-15	Interim lift, removed	13.0	7.9		x				3/24/2008	3/25/2008	OCA	WES AZ5057
T7-15	Interim lift, removed	15.0	10		x				3/27/2008	3/28/2008	OCA	WES AZ5076
<b>T7-15</b>	<b>Base of excavation</b>	<b>19.0</b>	<b>4.1</b>		<b>x</b>				<b>6/23/2008</b>	<b>6/25/2008</b>	<b>OCA</b>	<b>WES AZ5232</b>
<b>T7-16</b>	<b>Base of excavation</b>	<b>3.0</b>	<b>0.027</b>	<b>x</b>					<b>2/8/2008</b>	<b>2/11/2008</b>	<b>OCA</b>	<b>WES AZ4934</b>
T8-13	Interim lift, removed	3.0	1.1		x				2/7/2008	2/11/2008	ESC	L330996
<b>T8-13</b>	<b>Base of excavation</b>	<b>5.0</b>	<b>&lt;0.025</b>	<b>x</b>					<b>2/22/2008</b>	<b>2/23/2008</b>	<b>OCA</b>	<b>WES AZ4961</b>
T8-14	Interim lift, removed	3.0	9.8		x				2/7/2008	2/12/2008	ESC	L330996
T8-14	Interim lift, removed	5.0	14			x			2/22/2008	2/25/2008	OCA	WES AZ4961
T8-14	Interim lift, removed	8.0	1.2		x				3/6/2008	3/7/2008	OCA	WES AZ5004
T8-14	Interim lift, removed	10.0	1.2		x				3/18/2008	3/19/2008	OCA	WES AZ5033
<b>T8-14</b>	<b>Base of excavation</b>	<b>13.0</b>	<b>0.38</b>	<b>x</b>					<b>3/24/2008</b>	<b>3/25/2008</b>	<b>OCA</b>	<b>WES AZ5057</b>
T8-15	Interim lift, removed	3.0	4.7		x				2/15/2008	2/19/2008	OCA	WES AZ4950
T8-15	Interim lift, removed	5.0	7.4		x				2/22/2008	2/25/2008	OCA	WES AZ4961
T8-15	Interim lift, removed	8.0	5.1		x				3/6/2008	3/7/2008	OCA	WES AZ5004
T8-15	Interim lift, removed	10.0	23			x			3/18/2008	3/19/2008	OCA	WES AZ5033
T8-15	Interim lift, removed	14.0	9.8		x				3/24/2008	3/25/2008	OCA	WES AZ5057
T8-15	Interim lift, removed	16.0	7.4		x				3/27/2008	3/28/2008	OCA	WES AZ5076
<b>T8-15</b>	<b>Base of excavation</b>	<b>19.0</b>	<b>6.8</b>		<b>x</b>				<b>6/23/2008</b>	<b>6/25/2008</b>	<b>OCA</b>	<b>WES AZ5232</b>
<b>T8-16</b>	<b>Base of excavation</b>	<b>3.0</b>	<b>0.041</b>	<b>x</b>					<b>2/15/2008</b>	<b>2/18/2008</b>	<b>OCA</b>	<b>WES AZ4950</b>
<b>T9-13</b>	<b>Base of excavation</b>	<b>3.0</b>	<b>0.17</b>	<b>x</b>					<b>2/7/2008</b>	<b>2/11/2008</b>	<b>ESC</b>	<b>L330996</b>
T9-14	Interim lift, removed	3.0	0.99	x					2/7/2008	2/10/2008	ESC	L330996

Table 1  
Summary of PCB Verification Results  
Rows 4 though 10, Columns 13 through 16  
Washington Park Corporate Center, Lot 3  
Phoenix, AZ

EPA Method 8082  
Results in Milligrams per Kilogram (mg/kg)

Grid/Sample No.	Description	Depth of Lift (ft)	PCBs						Sampled	Analyzed	Lab	Lab Report No.
				≤1 PPM	1-10 PPM	10-25 PPM	25-50 PPM	>50 PPM				
T9-14	Interim lift, removed	5.0	1.1		x				2/22/2008	2/25/2008	OCA	WES AZ4961
T9-14	Interim lift, removed	7.0	0.13	x					2/29/2008	3/3/2008	OCA	WES AZ4978
<b>T9-14</b>	<b>Base of excavation</b>	<b>8.0</b>	<b>0.057</b>	<b>x</b>					<b>3/6/2008</b>	<b>2/28/2008</b>	<b>OCA</b>	<b>WES AZ5004</b>
T9-15	Interim lift, removed	3.0	5.4		x				2/15/2008	2/18/2008	OCA	WES AZ4950
T9-15	Interim lift, removed	5.0	3.9		x				2/22/2008	2/25/2008	OCA	WES AZ4961
T9-15	Interim lift, removed	7.0	2.0		x				2/29/2008	3/3/2008	OCA	WES AZ4978
T9-15	Interim lift, removed	8.0	2.4		x				3/6/2008	3/7/2008	OCA	WES AZ5004
T9-15	Interim lift, removed	10.0	1.3		x				3/18/2008	3/19/2008	OCA	WES AZ5033
<b>T9-15</b>	<b>Base of excavation</b>	<b>13.0</b>	<b>0.11</b>	<b>x</b>					<b>3/24/2008</b>	<b>3/25/2008</b>	<b>OCA</b>	<b>WES AZ5057</b>
<b>T9-16</b>	<b>Base of excavation</b>	<b>3.0</b>	<b>0.11</b>	<b>x</b>					<b>2/15/2008</b>	<b>2/19/2008</b>	<b>OCA</b>	<b>WES AZ4950</b>
T5-14 SSW	South Sidewall, T5-14	10.0	0.085	x					3/21/2008	3/24/2008	OCA	WES AZ5049
T5-14 WSW	West Sidewall, T5-14	10.0	<0.025	x					3/21/2008	3/24/2008	OCA	WES AZ5049
T5-15-ESW	East Sidewall, T5-15	5.5	<0.025	x					3/12/2008	3/13/2008	OCA	WES AZ5017
T5-15-SSW	South Sidewall, T5-15	5.5	0.027	x					3/12/2008	3/13/2008	OCA	WES AZ5017
T5-15-WSW	West Sidewall, T5-15, removed	5.5	9.5		x				3/12/2008	3/13/2008	OCA	WES AZ5017
T6-14-SSW	South Sidewall, T6-14, removed	5.5	2.2		x				3/12/2008	3/13/2008	OCA	WES AZ5017
T6-14-WSW	West sidewall, T6-14	5.5	0.19	x					3/12/2008	3/13/2008	OCA	WES AZ5017
T6-15-ESW	East Sidewall, T6-15	5.5	0.14	x					3/12/2008	3/13/2008	OCA	WES AZ5017
T7-15-ESW	East Sidewall, T7-15	5.5	0.067	x					3/12/2008	3/13/2008	OCA	WES AZ5017
T8-14-WSW	West Sidewall, T8-14	5.5	<0.025	x					3/12/2008	3/13/2008	OCA	WES AZ5017
T8-15-ESW	East Sidewall, T8-15	5.5	0.21	x					3/12/2008	3/13/2008	OCA	WES AZ5017
T9-14-NSW	North Sidewall, T9-14	5.5	0.087	x					3/12/2008	3/13/2008	OCA	WES AZ5017
T9-14-WSW	West Sidewall, T9-14	5.5	0.4	x					3/12/2008	3/13/2008	OCA	WES AZ5017
T9-15-NSW	North Sidewall, T9-15	5.5	0.65	x					3/12/2008	3/13/2008	OCA	WES AZ5017
T9-15-ESW	East Sidewall, T9-15	5.5	0.074	x					3/12/2008	3/13/2008	OCA	WES AZ5017
<b>T10-13</b>	<b>Base of excavation</b>	<b>3.0</b>	<b>&lt;0.085</b>	<b>x</b>					<b>2/7/2008</b>	<b>2/10/2008</b>	<b>ESC</b>	<b>L330996</b>
<b>T10-14</b>	<b>Base of excavation</b>	<b>3.0</b>	<b>&lt;0.085</b>	<b>x</b>					<b>2/7/2008</b>	<b>2/10/2008</b>	<b>ESC</b>	<b>L330996</b>
T10-15	Interim lift, removed	3.0	1.0	x					2/15/2008	2/19/2008	OCA	WES AZ4950
<b>T10-15</b>	<b>Base of excavation</b>	<b>5.0</b>	<b>0.13</b>	<b>x</b>					<b>2/22/2008</b>	<b>2/23/2008</b>	<b>OCA</b>	<b>WES AZ4961</b>
<b>T10-16</b>	<b>Base of excavation</b>	<b>3.0</b>	<b>0.068</b>	<b>x</b>					<b>2/15/2008</b>	<b>2/19/2008</b>	<b>OCA</b>	<b>WES AZ4950</b>

Table 2  
Summary of Total Metals Analysis for Profile/Screening  
Rows 5 through 8, Columns 14 and 15  
Washington Park Corporate Center, Lot 3, Phoenix, AZ

EPA Methods 3050/6000-7000  
Results in Milligrams per Kilogram (mg/kg)

Sample No.	Description	Depth of Lift (ft)	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	Sampled	Analyzed	Lab	Lab Report No.
T7-15-ESW	Screening Sample for High Odor Soil, east sidewall of Grid T7-15	4	nt	nt	nt	nt	nt	nt	nt	nt	2/29/2008	3/3/2008	OCA	WES AZ4977
T5-14-SSW	Screening Sample for High Odor Soil, south sidewall of Grid T5-14	6	nt	nt	nt	nt	nt	nt	nt	nt	2/29/2008	3/3/2008	OCA	WES AZ4977
PS-1	Screening Sample of Processed Stockpile @ Workface	6	nt	nt	nt	nt	nt	nt	nt	nt	2/29/2008	3/3/2008	OCA	WES AZ4977
T6-15-16P	High Odor Soil Material @ 16'	16	13	120	<0.5	10	3.2	<0.1	<5.0	<0.5	4/3/2008	4/4 , 4/7	OCA	WES AZ5087
T7-15-16P	High Odor Soil Material @ 16'	16	12	81	<0.5	8.2	3	<0.1	<5.0	<0.5	4/3/2008	4/4 , 4/7	OCA	WES AZ5087
T8-15-16P	High Odor Soil Material @ 16'	16	11	110	<0.5	8.2	2.4	<0.1	<5.0	<0.5	4/3/2008	4/4 , 4/7	OCA	WES AZ5087

**Table 3**  
**Summary of Polynuclear Aromatic Hydrocarbons (PAH) for Profile/Screening**  
**Rows 5 through 8, Columns 14 and 15**

Washington Park Corporate Center, Lot 3, Phoenix, AZ

EPA Method 8310  
Results in Micrograms per Kilogram (ug/kg)

Sample No.	Description	Depth of Lift (ft)																		Sampled	Analyzed	Lab	Lab Report No.
			Acenaphthene	Acenaphthalene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Pyrene	Fluorene	Phenanthrene	(Indeno(1,2,3-cd)pyrene)	Napthalene					
T7-15-ESW	East Sidewall, T7-15, odor response	4	<2	<5	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<5	2/29/2008	3/3/2008	OCA	WES AZ4977	
T5-14-SSW	South sidewall, T5-14, odor response	6	<2	<5	<2	<2	<2	<2	6.6	3.1	<2	<2	<2	<2	<2	<2	<2	<5	2/29/2008	3/3/2008	OCA	WES AZ4977	
PS-1	Processed stockpile @ workface in T6-15	6	<2	<5	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<5	2/29/2008	3/3/2008	OCA	WES AZ4977	
T6-15-16P	High Odor Soil Material @ 16', after ram hoe	16	<2	5	<2	<2	<2	<2	3.4	<2	<2	12	<2	12	23	49	24	<2	<5	4/3/2008	4/4 , 4/7	OCA	WES AZ5087
T7-15-16P	High Odor Soil Material @ 16' after ram hoe	16	6.1	<2	<2	<2	<2	<2	4	<2	<2	2.3	<2	15	25	<2	<2	<2	36	4/3/2008	4/4 , 4/7	OCA	WES AZ5087
T8-15-16P	High Odor Soil Material @ 16', after ram hoe	16	<2	<2	8.5	<2	<2	<2	<2	<2	<2	4.8	<2	8.7	5.6	<2	31	<2	36	4/3/2008	4/4 , 4/7	OCA	WES AZ5087

**Table 4**  
**Summary of Volatile Organic Compounds (VOCs) for Profile/Screening**  
**Washington Park Corporate Center, Lot 3 Phoenix, AZ**

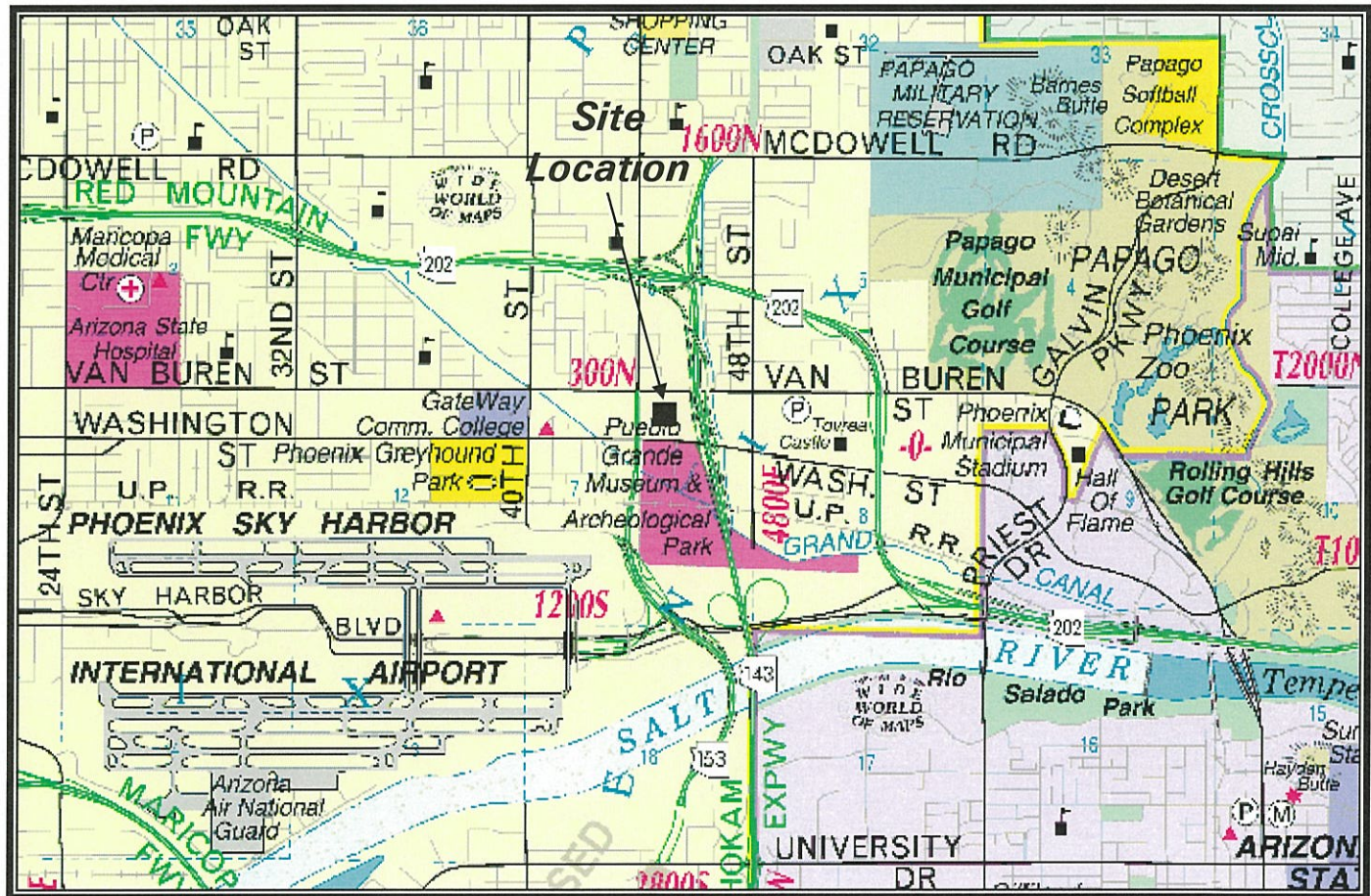
EPA Method 8260  
Results in Micrograms per Kilogram (ug/kg)

Sample No.	Description	Depth of Lift (ft)																	Lab	Lab Report No.
			n-Butylbenzene	sec- Butylbenzene	tert-Butylbenzene	p-Isopropyltoluene	4-Isopropyltoluene	4- Chlorotoluene	Tetrachloroethene	Trichloroethene	1,2,3- Trichlorobenzene	1,2,4-Trimethylbenzene	1,2,3-Trimethylbenzene	Total Xylenes	1,3,5-trimethylbenzene	Sampled	Analyzed			
T7-15-ESW	High Odor Soil, east sidewall of Grid T7-15	4	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	2/29/2008	3/3/2008	OC A	WES AZ4977	
T5-14-SSW	High Odor Soil, south sidewall of Grid T5-14	6	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	2/29/2008	3/3/2008	OC A	WES AZ4977	
PS-1	High Odor Soil, processed stockpile @ workface	6	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	2/29/2008	3/3/2008	OC A	WES AZ4977	
T6-15-16P	High Odor Soil Material @ 16'	16	bdl	100	65	nt	1000	<50	bdl	bdl	62	2700	nt	<150	2800	4/3/2008	4/4 , 4/7	OCA	WES AZ5087	
T7-15-16P	High Odor Soil Material @ 16'	16	bdl	<50	<50	nt	310	230	bdl	bdl	330	bdl	nt	<150	2100	4/3/2008	4/4 , 4/7	OCA	WES AZ5087	
T8-15-16P	High Odor Soil Material @ 16'	16	bdl	78	210	nt	bdl	<50	59	bdl	750	100	nt	230	370	4/3/2008	4/4 , 4/7	OCA	WES AZ5087	

## APPENDIX A



Figure 1 – Vicinity Map  
 Washington Park Corporate Center  
 Lot 3, Trillium Residential  
 Washington Street and 44<sup>th</sup> Street  
 Phoenix, Arizona




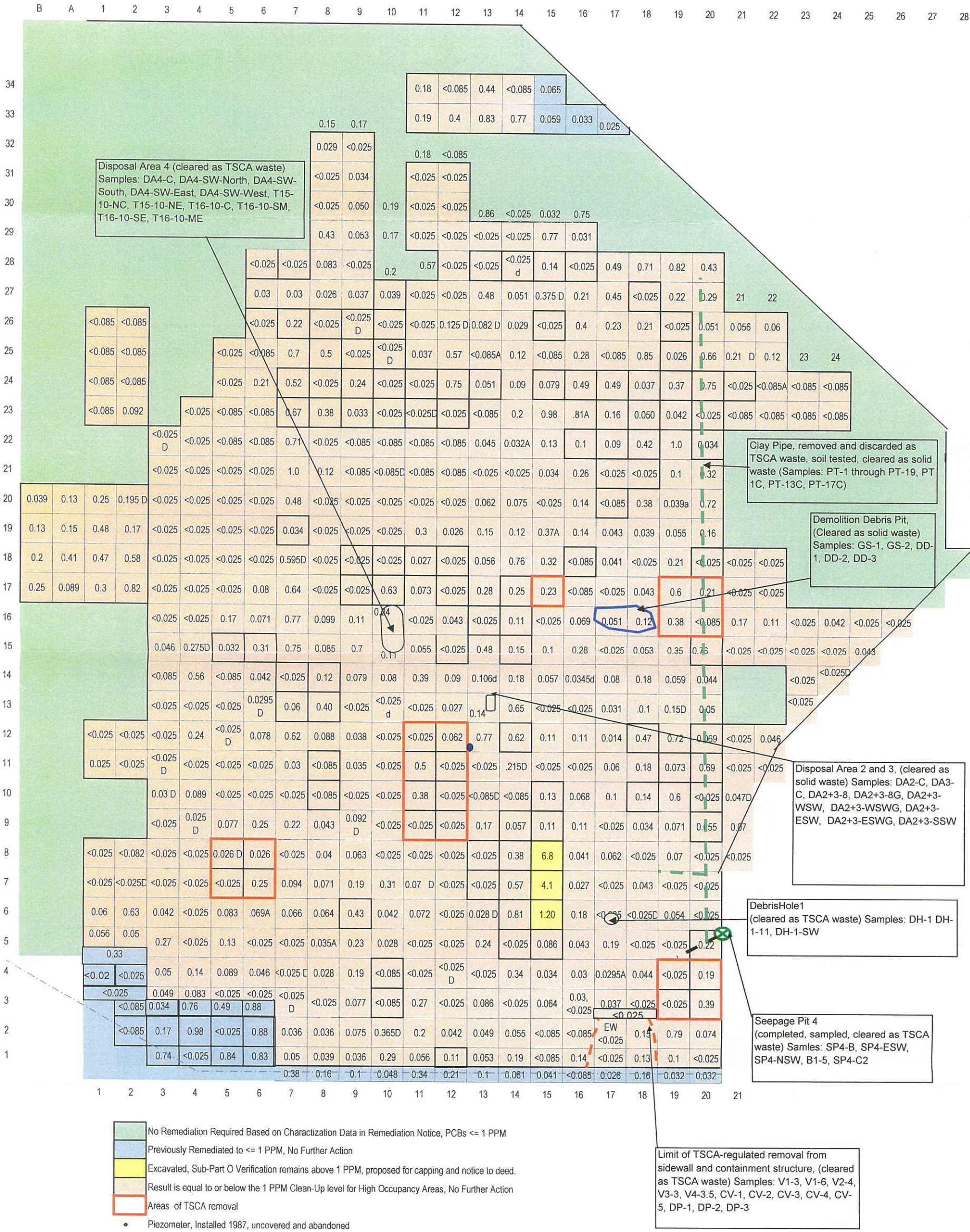
<div style="text-align: center;">             N            ↑            Not to Scale         </div>	AIG Retirement Services, Inc.	
	Amendment to PCB Remediation Notice	
	Western Technologies Inc.	
	Job No. 2187JK154	Date: 7/22/2008

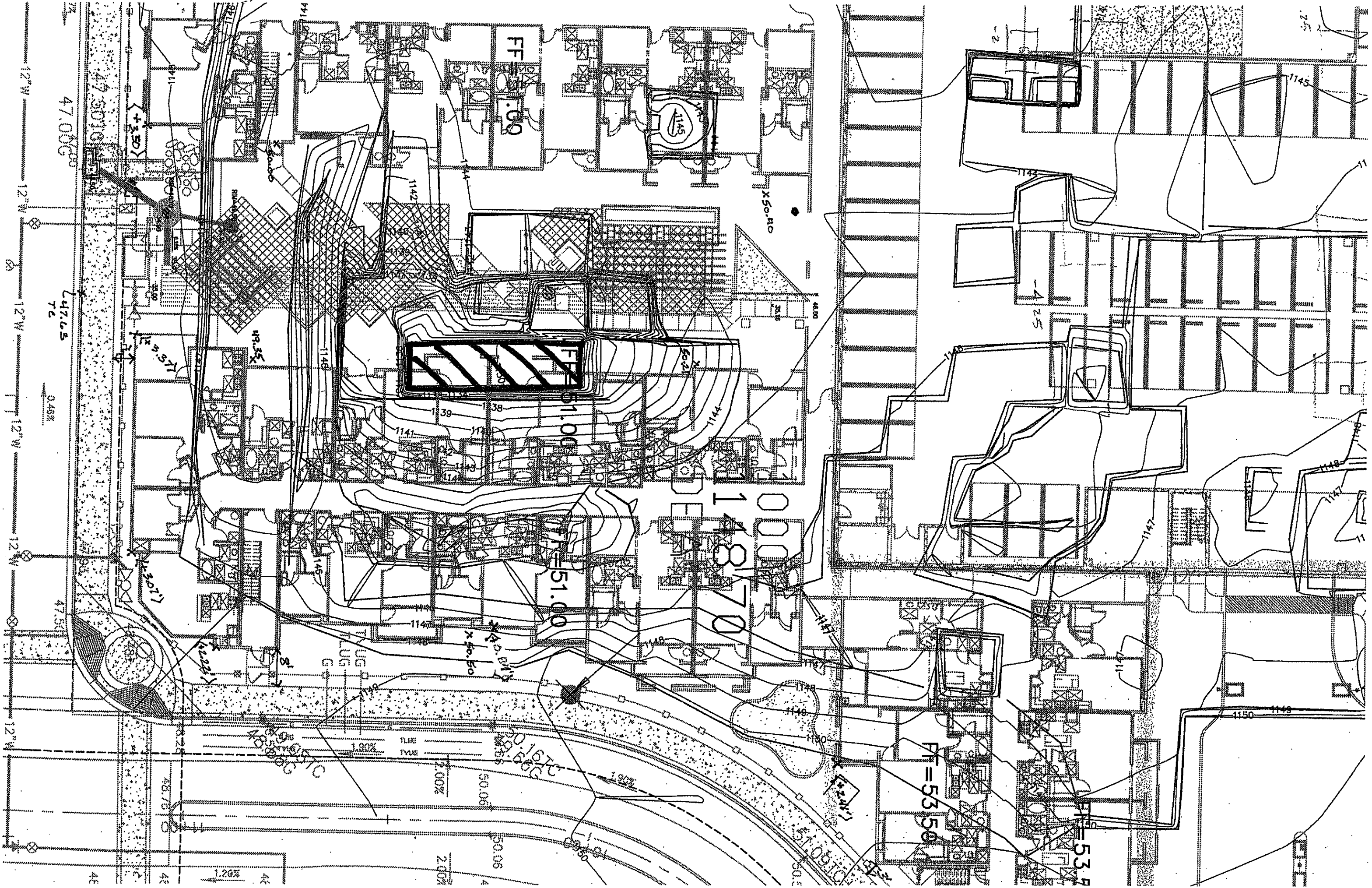
Figure 2 - Preliminary Verification Grid  
Washington Park Corporate Center  
Lot 3, Trillium Residential  
Washington Street and 44th Street  
Phoenix, AZ  
WT Job No. 2188JK154  
7/7/2008



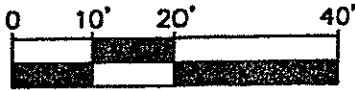
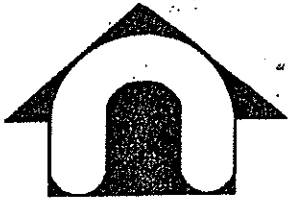
**EXHIBIT 1**



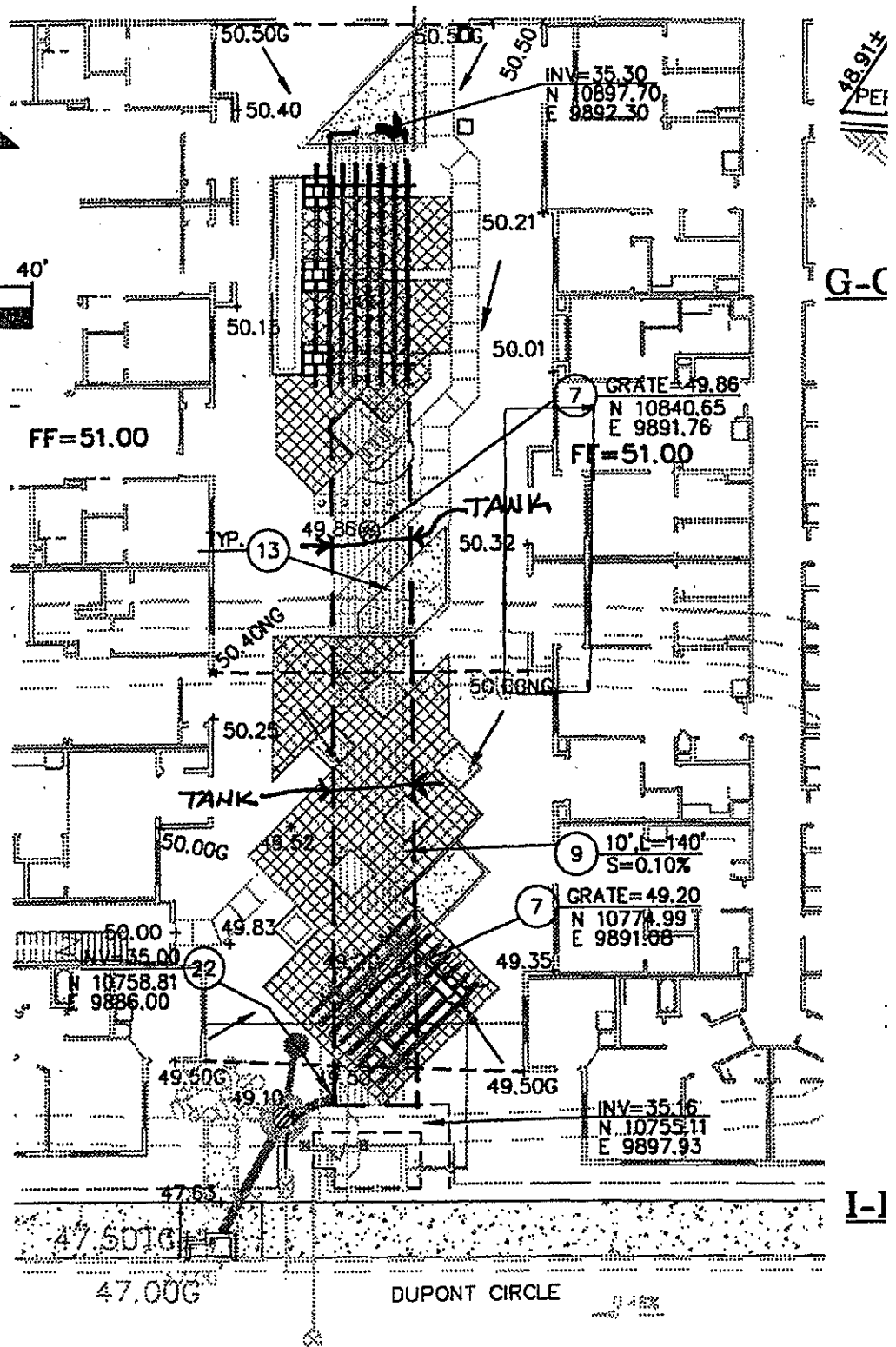
**EXHIBIT 2**



**EXHIBIT 3**



SCALE:



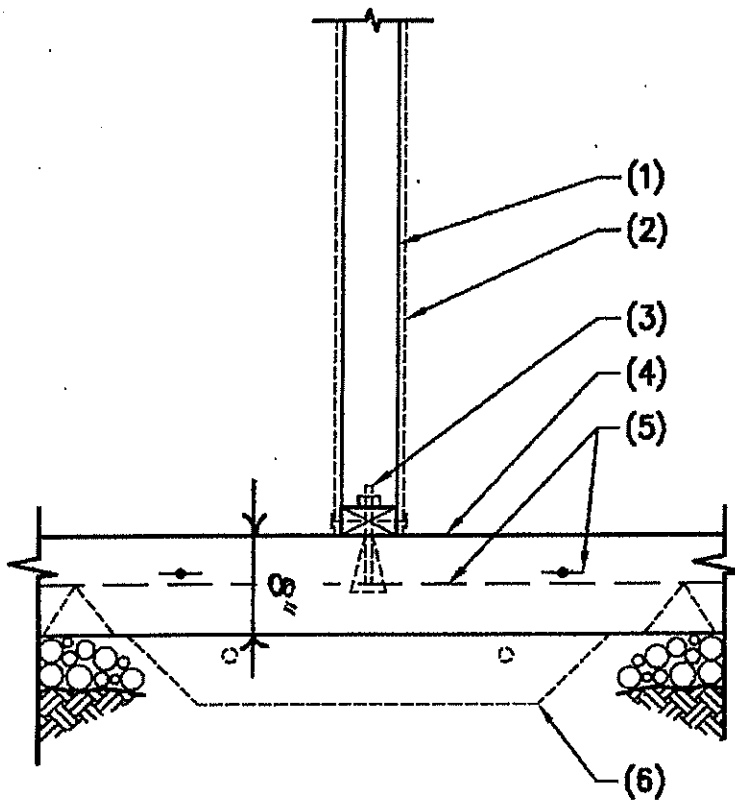
**DETAIL 4**  
SCALE:

**GRADING AND DRAINAGE PLANS  
TRILLIUM AT 44TH STREET  
111 N. DUPONT CIRCLE  
PHOENIX, ARIZONA**

**EXHIBIT 4**



**EXHIBIT 5**



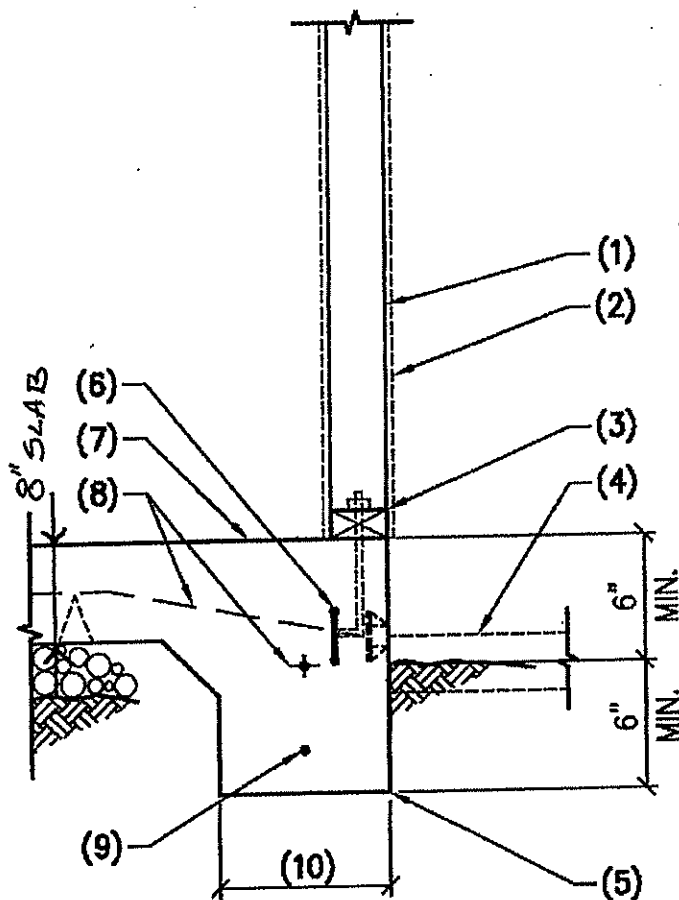
**NOTES:**

1. WOOD STUD WALL.
2. SHEATHING MATERIAL AND ATTACHMENT AS OCCURS.
3. CONTINUOUS 2X PLATE WITH 1/2" DIA EXPANSION BOLTS WITH 4" EMBEDMENT AT END OF WALLS, JAMBS AND AT 48" O.C. - TYP U.N.O.
4. POST-TENSIONED CONCRETE SLAB ON GRADE.
5. POST-TENSIONED TENDONS WITH CHAIRS AS OCCUR.
6. AT DETAIL 104A, INSTALL 24" WIDE X 12" DEEP THICKENED SLAB WITH 2 #4 CONTINUOUS. EXTEND 24" BEYOND END OF WALL WHERE SHOWN ON PLAN.
7. AT DETAIL 104B, INSTALL 12" DEEP THICKENED SLAB PER PLAN WITH #4 AT 12" O.C. EACH WAY.

104	WOOD STUD WALL AT POST-TENSIONED CONCRETE SLAB	
104A 104B	AS NOTED	07-694 NO SCALE

<p style="text-align: center;"> <b>Residential Building</b>  <b>Trillium 44</b>  <b>111 N. Dupont Circle, Phoenix, AZ</b>  <b>TRILLIUM DEVELOPMENT, LLC</b>          230 West Fifth Street          Tempe, AZ 85281       </p>
--

**EXHIBIT 6**



# NOTES:

1. WOOD STUD WALL.
2. SHEATHING MATERIAL AND ATTACHMENT AS OCCURS.
3. CONTINUOUS 2x4 PLATE WITH 1/2" DIA ANCHOR BOLTS AT 48" O.C. MAX U.N.O.
4. FINISHED GRADE OR CONCRETE SLAB ON GRADE AS OCCURS.
5. EXTERIOR EDGE BEAM FOOTING.
6. HAIRPINS PER DETAIL 34. AT EACH TENDON.
7. POST-TENSIONED CONCRETE SLAB ON GRADE.
8. POST-TENSIONED TENDONS WITH CHAIRS AS OCCUR.
9. 1 #4 CONTINUOUS.  
2 #4 CONTINUOUS AT DETAIL 101A.
10. 12" WIDE -- TYP U.N.D..  
24" WIDE AT DETAIL 101A --  
EXTEND 24" BEYOND END OF WALL WHERE SHOWN ON PLAN.

## NOTE:

AT WALL OPENINGS, OMIT WALL AND PLATE AND INSTALL TOOLED EDGE AT EXPOSED CONCRETE.

101	WOOD STUD WALL AT POST-TENSIONED CONCRETE SLAB AND FOOTING
101A	AS NOTED
	07-694 NO SCALE

## Residential Building

Trillium 44

111 N. Dupont Circle, Phoenix, AZ

TRILLIUM DEVELOPMENT, LLC

230 West Fifth Street

Tempe, AZ 85281

**EXHIBIT 7**

